

## **AMENDMENTS TO THE CLAIMS**

### **Listing of the claims:**

1. (Currently Amended) A method of reducing both NO<sub>x</sub> and particulates in the exhaust of hydrocarbon-burning, internal combustion engines, comprising:

providing in the exhaust stream of an internal combustion engine at least one porous, interdigitated ceramic filter including a plurality of inlet channels and a plurality of outlet channels contiguous with said inlet channels, and having NO<sub>x</sub> adsorbent material and NO<sub>x</sub> reduction catalyst disposed on or in at least one of (a) on the surfaces of said channels or (b) within the pores of said filter or (c) within the material of which said filter is composed; and

alternatively providing to each of said inlet channels syngas and said exhaust in an interleaved fashion, thereby to regenerate said NO<sub>x</sub> adsorbing material and to catalytically burn particulates trapped in said filter, wherein both syngas and said exhaust are simultaneously provided to said filter.

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Previously Presented) The method of claim 1, wherein the NO<sub>x</sub> adsorbent material comprises barium carbonate.

9. (Previously Presented) The method of claim 1, wherein the NO<sub>x</sub> reduction catalyst comprises platinum.

10. (Canceled)

11. (Currently Amended) The method of claim [[10]]L, wherein syngas is provided to between 0.5% and 50% of said inlet channels.